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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,105	11/20/2003	Hirokazu Yamamoto	KM-US030558	1104
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GLOBAL IP COUNSELORS, LLP 1233 20TH STREET, NW, SUITE 700 WASHINGTON, DC 20036-2680			EXAMINER HA, NGUYEN Q	
			ART UNIT 2854	PAPER NUMBER
			MAIL DATE 12/19/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/707,105

Applicant(s)

YAMAMOTO ET AL.

Examiner

'Wynn' Q. HA

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

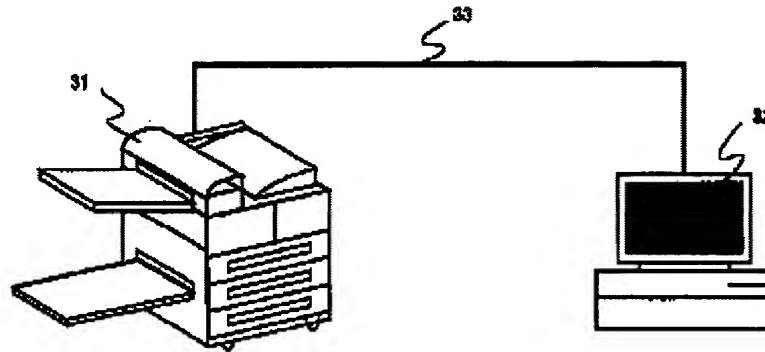
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1, 7 and 13-16** rejected under 35 U.S.C. 102(b) as being anticipated by Itagi et al. (JP 11184590 A).

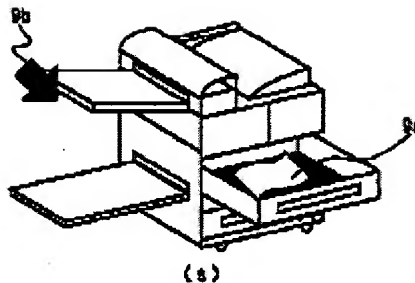
Claims 1 and 7:

Itagi teaches an abnormality management device or system connected via a network (See fig. 15) to an image forming device 31 or connected directly on the image forming device itself (Paragraph [0030] "This status-display equipment may be arranged in the control panel of the image forming equipment, etc. and may be realized on a PC connected to the image forming equipment) that includes a plurality of selectively used paper supply units or paper discharge units, the abnormality management device managing abnormalities in the image forming device and comprising:

【図15】



【図14】



a display unit 13 that displays an image of an image forming device in which the plurality of the paper supply units or paper discharge units are visually distinguished from each other (See fig. 14a, abstract and paragraphs [0027] & [0028]);

an abnormality detection unit 11 ("condition acquisition section 11") that detects abnormalities in the paper supply units or the paper discharge units

based upon equipment data acquired from the image forming device, the abnormalities being different from an amount of paper in the paper supply unit (paragraph [0031] 'the detection means which consists of a sensor which detects a paper jam, the switching condition of a form piece and a tray, etc."); and

an abnormality display unit 13 that displays with emphasis the location of the paper supply unit or paper discharge unit in which an abnormality was detected by the abnormality detection unit on the image of the image forming device (e.g. Fig. 14a showing an image of the image forming device and indicating a paper jam in the upper paper supply unit).

Claim 13:

A computer readable medium comprising an abnormality program having all the features being claimed (Paragraph [0034] "a control program").

Claims 14 and 15:

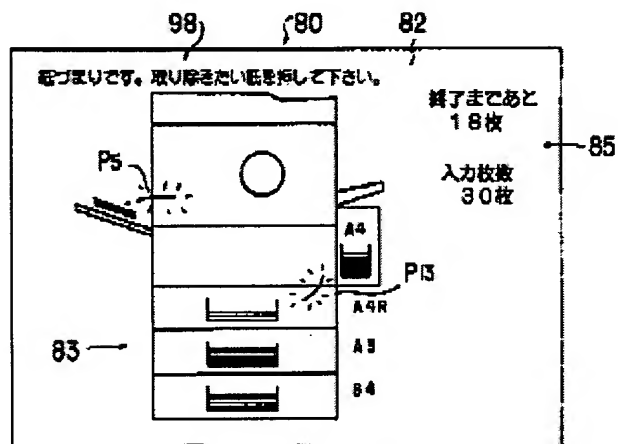
The abnormality management device set forth in claim 1, wherein emphasis includes at least one of a differentiating color, design, and a flashing light.

Claim 16:

The computer readable medium set forth in claim 13, wherein emphasis includes at least one of a differentiating color, design, and a flashing light.

3. Claims 7, 13, 15 and 16 rejected under 35 U.S.C. 102(b) as being anticipated by Tada (JP 08262932 A).

【图10】



Tada teaches an abnormality management system (See fig. 10) for an image forming device, comprising:

An image forming device (fig. 1) comprising a plurality of selectively used paper supply units or paper discharge units, and

an abnormality management device 80 connected to the image forming device which manages abnormalities in the image forming device, the abnormality management device comprising

a display unit 80 that displays an image 83 of an image forming device in which the plurality of the paper supply units or paper discharge units are visually distinguished from each other;

an abnormality detection unit 110 that detects abnormalities in the paper supply units or the paper discharge units based upon equipment data acquired from the image forming device, the abnormalities being different from an amount of paper in the paper supply unit (paragraph [0041] “control section 110 detects the jam generating location”); and

an abnormality display unit 83 that displays with emphasis the location of the paper supply unit or paper discharge unit in which an abnormality was detected by the abnormality detection unit on the image of the image forming device (e.g. Fig. 10 showing an image of the image forming device and indicating a paper jam P13 in the uppermost paper supply unit).

Claim 13:

A computer readable medium comprising an abnormality program (Figs. 5 & 8) having all the features being claimed.

Claim 15:

The abnormality management device set forth in claim 7, wherein emphasis includes at least one of a differentiating color, design, and a flashing light.

Claim 16:

The computer readable medium set forth in claim 13, wherein emphasis includes at least one of a differentiating color, design, and a flashing light.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over Tada (JP 08262932 A) in view of Itagi.

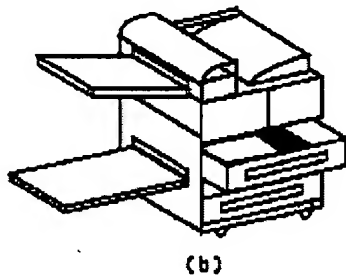
Tada, as discussed above, teaches all that is claimed except the abnormality management device is connected to the image forming unit via a network.

Itagi, as discussed above, teaches an abnormality management device connected to the image forming unit via a network to provide a user on the network with information regarding condition of the image forming device.

It would have been obvious to one of ordinary skill in the art at the time the present invention was made to have Yada's abnormality management device connected to an image forming device via a network, as taught by Itagi, to provide a user on the network with information regarding condition of the image forming device.

Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itagi in view of Higuchi (US 6,259,468).

Itagi in view of Higuchi, as discussed above, teaches the abnormality management device set forth in claim 1 or 7, further comprising



an out of paper determining unit 11 that determines based upon equipment data acquired from the image forming device whether any of the plurality of paper supply units have run out of paper, and

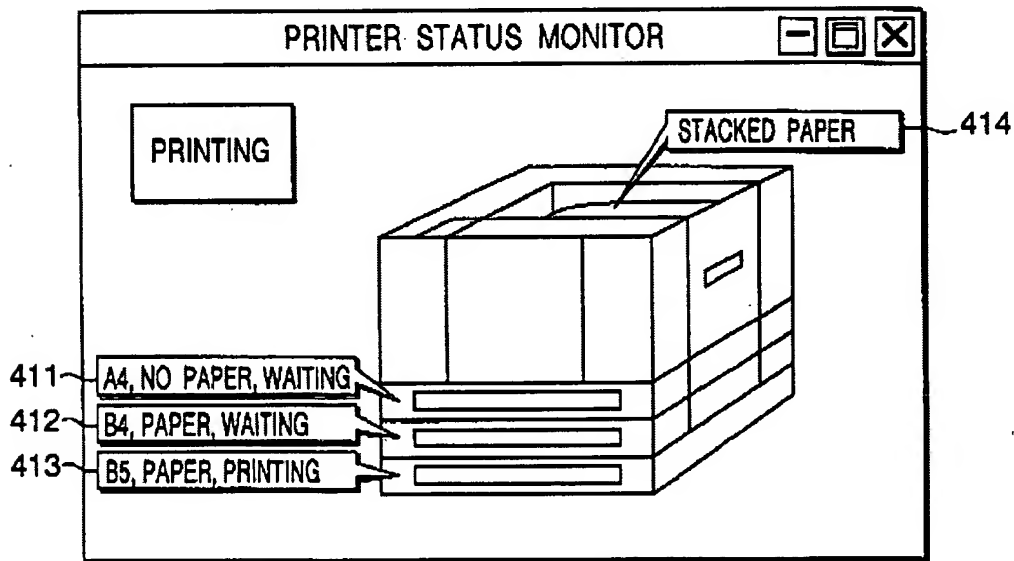
an display unit 11 that displays with emphasis the position of a paper supply unit that has run out of paper on the image of the image forming device by means of a representation (See fig. 16b, paragraphs [0020], [0021], [0064], [0067] “the animation displayed is characterized by being an abnormal condition containing a paper jam, a form piece, and a toner piece,... [which are] a form residue and a toner residue...For example, when a user thinks that he will check the residue and classification of a toner or a form which are an article of consumption in an image forming equipment, such information can be acquired through animation display...Drawing 16 is drawing having shown the example of animation display in a case of checking a form”) that is different from a

representation used to display the paper supply unit in which an abnormality was detected (Fig. 16b shows a representation that is different from that of fig. 14a).

Itagi, however, is silent about the display indicates an out of paper.

Higuchi, as discussed in the Office action of 8/28/2007, teaches a display unit (See fig. 6) that displays an image of an image forming device in which the plurality of the paper supply units or paper discharge units are visually distinguished from each other; an out of paper display unit that displays with emphasis the position of a paper supply unit (uppermost tray) that has run out of paper on the image of the image forming device by means of a representation, in order to show a state of out-of-paper to alert a user.

FIG. 6



It would have been obvious to one of ordinary skill in the art at the time the present invention was made to have Itagi's device to also display the image, e.g. fig. 16b, when a paper supply unit is out of paper, as taught by Higuchi, to indicate an out of paper to alert a user.

6. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itagi in view of Badovinac et al. (US 2004/0228639 A).

Itagi, as discussed above, teaches all that is claimed (See claims 1 and 7 of paragraph 2) except for a sound abnormality generating unit that generates a sound when an abnormality is detected.

Badovinac teaches an abnormality management device for an image forming device, wherein "when a paper jam has occurred on printer 1, the display turns to the state [indicating a jam]...also an audible and/or vibration alarm is issued (Paragraph [0079])," in order to alert a user.

It would have been obvious to one of ordinary skill in the art at the time the present invention was made to have Itagi's device also include a sound abnormality generating unit that generates a sound when an abnormality is detected in order to alert the user, as taught by Badovinac.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tada in view of Itagi, and further in view of Badovinac.

Tada in view of Itagi, as discussed above, teaches all that is claimed (See claim 1 of paragraph 5) except for a sound abnormality generating unit that generates a sound when an abnormality is detected.

Badovinac, as discussed above, teaches an audible and/or vibration alarm is issued (Paragraph [0079])," in order to alert a user.

It would have been obvious to one of ordinary skill in the art at the time the present invention was made to have Tada's device, as modified, also include a sound abnormality generating unit that generates a sound when an abnormality is detected in order to alert the user, as taught by Badovinac.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tada in view of Badovinac.

Tada teaches all that is claimed (See claim 7 of paragraph 3) except for a sound abnormality generating unit that generates a sound when an abnormality is detected.

Badovinac, as discussed above, teaches an audible and/or vibration alarm is issued (Paragraph [0079])," in order to alert a user.

It would have been obvious to one of ordinary skill in the art at the time the present invention was made to have Tada's device also include a sound abnormality generating unit that generates a sound when an abnormality is detected in order to alert the user, as taught by Badovinac.

9. **Claims 2, 4, 5, 8, 10 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's disclosed prior art in view of Itagi, Tada and/or Badoviac (as discussed above and in the Office action of 8/28/2007).

10. **Claims 17 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Itagi in view of Hosaka et al. (JP 56154751 A).

Itagi, as discussed above, teaches the abnormality management device set forth in claim 1. Itagi also teaches the abnormality detection unit 11 detects a condition of the paper supply unit (Paragraph [0031] "the detection means which consists of a sensor which detects a paper jam, the switching condition of a form piece and a tray, etc)."

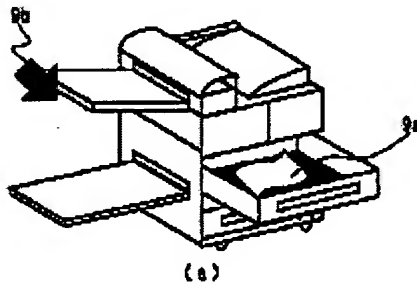
Itagi doesn't expressly teach the (displayed) abnormalities in the paper tray unit consist of paper jams and improperly mounted cassettes.

Hosaka teaches sensing and controlling abnormalities in an image forming device, the abnormalities include "presence of cassettes of recording papers, presence of recording papers in them, arrival of the papers at a given point, feed and discharge of originals (i.e. conveyance or jam states), and the like states are detected by sensors in a copying apparatus, and start, stop, continuation, etc. of record processing actions are controlled by a microcomputer MPU. Sensor PS1 for detecting attachment of a cassette and sensor MS1 are combined via transistor Tr in series to connect them to detection port P1-1 of MPU, and as for the other sensors, similar connections are made, thus permitting the port number

to be reduced remarkably, a sensor connection system to be simplified, and readout efficiency to be enhanced (Abstract).”

It would have been obvious to one of ordinary skill in the art at the time the present invention was made to include a state of improperly mounted cassettes as an abnormality and further to combine the detection/display of the state of paper jams with the detection/display of the state or condition of the paper supply unit (absent or improperly mounted). That is, for example, both the states of paper jams and/or improperly mounted upper cassette would be indicated by the displayed image shown in fig. 14a. This would reduce the number of necessary input and output ports, as taught by Hosaka.

【図14】



Response to Arguments

11. Applicant's arguments with respect to claims 1, 7 and 13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to 'Wynn' Q. HA whose telephone number is 571-272-2863. The examiner can normally be reached on Monday - Friday, from 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NQH
December 17, 2007

/Daniel J. Colilla/
Primary Examiner
Art Unit 2854